

REMARKS

Claims 1-20 are pending in the application, of which, claim 9 has been amended and claims 1-8 and 10-20 remain in their original form. No new matter has been added by the foregoing amendment. Reconsideration of this application in light of the above amendments and the following remarks is requested.

I. Rejections Under 35 U.S.C. §102

Claim 1 recites the following:

1. A method for performing a hard handoff of a call for a mobile unit operating in a packet communications network, the method comprising:

establishing a first link between a node connected to an existing radio resource serving the call and a target media gateway connected to a target radio resource for serving the call after the hard handoff;

before the hard handoff is executed, simultaneously transmitting call information from both the target radio resource and the existing radio resource to the mobile unit;

executing the hard handoff; and

after the hard handoff is executed, transmitting the call information only from the target radio resource.

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Denman et al. (U.S. Patent No. 6,490,451 hereinafter referred to as "Denman").

The PTO provides in MPEP § 2131 that

"[t]o anticipate a claim, the reference must teach every element of the claim...."

Therefore, with respect to claim 1, to sustain this rejection the Denman reference must contain all of the above claimed elements of the claim. However, contrary to the Examiner's position that all elements are disclosed in the Denman reference, Applicants respectfully submit

that Denman does not disclose the step of, “establishing a first link between a node connected to an existing radio resource and a target media gateway connected to a target radio resource for serving the call after the hard handoff.”

With regard to the step of “establishing a first link between a node connected to an existing radio resource and a target media gateway connected to a target radio resource for serving the call after the hard handoff,” the Examiner alleges that the cited passage, Col. 24, lines 46-65, of Denman discloses such a method step. (See Office Action, pg. 2). Applicants respectfully disagree. More specifically, the cited passage (including FIG. 10A) of Denman recites the following:

Noting that MT 102 intends to drop its last current active PN offset, and also noting that one or more candidate target cells are outside of its domain, RAN_S 1004 delivers an IS-634 Handoff Required message to a WMS/TP 1008 as shown at step c. This message contains a list of candidate target cells, along with their pilot strengths, recommends a hard handoff (HHO), and requests that WMS 1008 find a target cell with an available radio channel. Having determined that the target cell is in the domain of the target RAN (RAN_T) 1014, WMS 1008 delivers an IS-634 Handoff Request message to RAN_T 1014, as illustrated at step d. This Handoff Request message identifies the DSO channel (DSO_{WAG-T}) of the target WAG (WAG_T) 1010 that will provide connectivity between RAN_T 1014 and WAG_T 1010. RAN_T 1014 allocates and prepares appropriate radio and terrestrial resources for the requested handoff, begins transmitting null data on the allocated forward TCH, and, as shown in step e, sends an IS-634 Handoff Request Acknowledge message to WMS/TP 1008. This message provides the information that MT 1002 will need to execute the handoff.

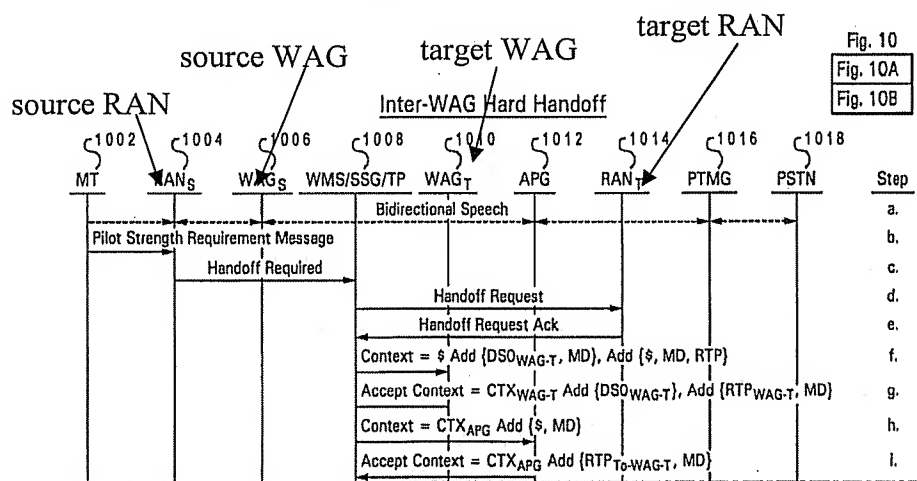


Fig. 10A

Denman also indicates that “[i]t is further assumed that the source and target RANs are not the same, and that each RAN is served by a different WAG. These source and target WAGs and RANs are identified in FIG. 10 as WAG_S 1006, RAN_S 1004, WAG_T 1010, and RAN_T 1014.” (See Denman, Col. 24, lines 23-27). Accordingly, the source (or existing) RAN_S is served by the source (or existing) WAG_S and the target RAN_T is served by the target WAG_T. Nowhere in the cited passage does it disclose the step of, “establishing a first link between a node connected to an existing radio resource and a target media gateway connected to a target radio resource for serving the call after the hard handoff,” as is recited in claim 1. The cited passage of Denman discloses that the “Handoff Request message identifies the DSO channel [] of the target WAG (WAG_T) 1010 that will provide connectivity between RAN_T 1014 and WAG_T 1010.” Accordingly, the link is not “between a node connected to an existing radio resource and a target media gateway connected to a target radio resource for serving the call after the hard handoff.”

For at least this reason, the Denman reference is insufficient to anticipate claim 1. Therefore, the rejection of claim 1 under 35 U.S.C. §102 is not supported by the Denman reference, and withdrawal of the rejection of claim 1 is requested.

Additionally, now turning to claim 6, which depends from and further limits claim 1, claim 6 recites, “wherein the node is an existing media gateway.” The Examiner alleges that Denman further teaches this element in the cited passages of: the Abstract; Col. 3, lines 60-67 and Col. 4, lines 1-3; Col. 6, lines 53-58. (See Office Action, pg. 3). Applicants respectfully disagree. More specifically, the Abstract describes generally a method and system for providing packet switched management of switching and handoff. The cited passage of Col. 3, lines 60-67 and Col. 4, lines 1-3 describes components of the packet switched system, such as WAG, APG, WMS, and MGC. The cited passage of Col. 6, lines 53-58 describes the relationship between the WAG, RAN, and APG. Even combining these cited passages with the previously cited passage (Col. 24, line 46-65) from above with respect to claim 1, nowhere does it disclose a method step of “establishing a first link between [an existing media gateway] connected to an existing radio resource and a target media gateway connected to a target radio resource for serving the call after the hard handoff,” as is recited in claim 6. Again, the cited passage of Denman (Col. 24, 46-65)

discloses that the “Handoff Request message identifies the DSO channel [] of the target WAG (WAG_T) 1010 that will provide connectivity between RAN_T 1014 and WAG_T 1010.” Therefore, the link is not established between the source WAG_S (e.g., existing media gateway) and the target WAG_T (e.g., target media gateway).

Thus, the rejection of claim 6 under 35 U.S.C. §102 is not supported by the Denman reference and should be withdrawn.

Now turning to independent claim 8 which recites similar features as claim 1 and was rejected for similar rationale. Therefore, the same distinctions between Denman and the claimed invention in claim 1 apply for claim 8. For the reasons described above with regard to claim 1, Denman does not contain all elements of independent claim 8. Hence, Denman fails to anticipate claim 8. Consequently, it is respectfully urged that the rejection of claim 8 under 35 U.S.C. §102 has been overcome, and withdrawal of the rejection thereto is requested.

Now turning to independent claim 9, which recites the following:

9. A method for performing a hard handoff in a first packet voice network, the method comprising:

detecting a potential handoff situation of a mobile unit to a target radio resource connected to the first packet voice network;

establishing a speech path, from an existing node associated with an existing radio resource, to the target radio resource through a target node associated with the target radio resource;

instructing the target node to transmit speech to the mobile unit through the target radio resource before the hard handoff occurs;

performing the hard handoff.

Claim 9 was rejected under 35 U.S.C. §102(b) as being anticipated by Denman. Therefore, with respect to amended claim 9, to sustain this rejection the Denman reference must contain all of the above claimed elements of the claim. However, Applicants respectfully submit that Denman does not disclose the step of “establishing a speech path, from an existing node

associated with an existing radio resource, to the target radio resource through a target node associated with the target radio source,” as is recited in claim 9.

In the hard handoff example of Denman, the bi-direction speech path that is established is between the RAN_T (target radio access network) and the landline terminal such that voice data is sent from the landline terminal to both the WAG_S (source wireless access gateway) and WAG_T (target wireless access gateway). (See Denman, Col. 25, lines 18-26). Furthermore, nowhere in the inter-WAG Hard Handoff example of Denman does it teach establishing a speech path from an existing node associated with an existing radio resource (e.g., WAG_S) to the target radio resource through a target node associated with the target radio resource (e.g., WAG_T). (See Denman, Col. 24, line 15 through Col. 25, line 67; FIG. 10).

For at least this reason, the Denman reference is insufficient to anticipate claim 9. Therefore, the rejection of claim 9 under 35 U.S.C. §102 is not supported by the Denman reference, and withdrawal of the rejection of claim 9 is requested.

II. Rejections Under 35 U.S.C. §103

Claim 14 recites the following:

- 14. A media gateway comprising:
 - a control interface for receiving control information from a remote node;
 - first, second, and third call ports for transmitting and receiving packet call information;
 - a processor for performing instructions response to received control information; and
 - a memory for storing a plurality of instructions, wherein the instructions include:
 - instructions, responsive to a potential hard handoff from a first radio resource to a second radio resource being identified, for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit through the second radio resource;

instructions, responsive to a completion of a hard handoff from the first radio resource to the second radio resource, for modifying the speech path to drop the second call port.

Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Denman in view of Ekman (U.S. Patent No. 6,807,422 hereinafter referred to as "Ekman"). Applicants traverse this rejection on the grounds that these references are defective in supporting a *prima facie* case of obviousness with respect to claim 14.

As the PTO recognizes in MPEP § 2142:

... The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness...

It is submitted that, in the present case, the Examiner has not factually supported a *prima facie* case of obviousness for the following, mutually exclusive, reasons.

1. Even When Combined, the References Do Not Teach the Claimed Subject Matter

The Denman and Ekman references cannot be applied to reject claim 14 under 35 U.S.C. § 103 which provides that:

A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains ... (Emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. However, since neither Denman nor Ekman teaches "instructions, responsive to a potential hard handoff from a first radio resource to a second radio resource being identified, for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit

through the second radio resource” as is claimed in claim 14, it is impossible to render the subject matter of claim 14 as a whole obvious, and the explicit terms of the statute cannot be met.

The Examiner pointed to where in Denman the computer memory was disclosed (Col. 30, lines 39-67 and Col. 31, lines 1-3). (See Office Action, pg. 6). However, the Examiner did not point to where in Denman does it disclose, “instructions, responsive to a potential hard handoff from a first radio resource to a second radio resource being identified, for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit through the second radio resource,” as is recited in claim 14. In the inter-WAG hard handoff example of Denman, there is no teaching of instructions “for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit through the second radio resource.” (See Denman, Col. 24, line 15 through Col. 25, line 67; FIG. 10).

Additionally, Applicants submit that the Ekman reference fails to cure this deficiency. As indicated by the Examiner, “Ekman...discloses a gateway having a set of selectable ports which could be termed as first, second, and third call ports for transmitting and receiving packet call information as well.” (See Office Action, pg. 6). However, the Ekman reference also does not teach instructions “for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit through the second radio resource.”

Thus, the Denman and Ekman references do not support a *prima facie* case of obviousness, and the rejection under 35 U.S.C. §103 of claim 14 should be withdrawn.

2. The Combination of References Is Improper

Assuming, arguendo, that none of the above arguments for non-obviousness apply (which is clearly not the case based on the above), there is still another mutually exclusive and

compelling reason why Denman and Ekman cannot be applied to reject claim 14 under 35 U.S.C. §103. That is, neither Denman nor Ekman teaches, or even suggests, the desirability of the combination since neither teaches “instructions, responsive to a potential hard handoff from a first radio resource to a second radio resource being identified, for splitting a speech path from the first call port to both the second call port and to the third call port, wherein the first call port connects to a first terminal unit, the second call port connects to a mobile unit through the first radio resource, and the third call port connects to the mobile unit through the second radio resource,” as specified above and as recited in claim 14.

Thus, it is clear that neither reference provides any incentive or motivation supporting the desirability of the combination. Therefore, there is simply no basis in the art for combining the references to support a 35 U.S.C. §103 rejection of claim 14.

In this context, the courts have repeatedly held that, absent some teaching, suggestion or incentive supporting combination, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention. In the present case, it is clear that the Examiner’s combination arises solely from hindsight based on the invention and without any showing, suggestion, incentive or motivation in either reference for the combination as applied to claim 14. Therefore, for this mutually exclusive reason, the Examiner’s burden of factually supporting a *prima facie* case of obviousness has clearly not been met with respect to claim 14, and the rejection of claim 14 under 35 U.S.C. §103 should be withdrawn.

III. Conclusion

It is clear from all of the foregoing that independent claims 1, 8, 9, and 14 are in condition for allowance. Dependent claims 2-7, 10-13, and 15-20 depend from and further limit independent claims 1, 8, 9, and 14 are therefore allowable as well.

An early formal notice of allowance of claims 1-20 is requested. The Examiner is invited to call the undersigned at the below-listed number if a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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